

REVIEW

A Modern Multilingual Glossary for Taxonomic Pteridology, by David B. Lellinger. 2002. *Pteridologia* 3:5–263. Published by the American Fern Society. Hardcover [ISBN 0-933500-02-5]. 263 pp. \$28.00.

Every field of study requires its own metric: a standard that can be employed to establish precision and insure accurate communication. Lellinger's glossary is that standard for systematic pteridology. The first sentence in the Introduction states that "Accurate communication is the essence of plant taxonomy." Without doubt, accuracy and its alter ego, conciseness, are the reasons scientific terminology is so extensive. In taxonomy, single words have evolved to depict precise, narrowly specific morphological conditions. Thus, a relatively short string of nouns and modifiers can provide a summation of a species hypothesis as well as define predicted boundaries with sister taxa. Unlike species, however, terms have no type specimens and in their absence the application of terms is likely to vary across a discipline as much as common names do across a continent. One need only look at any recent general biology text to see the degeneration of terminology. Examine, for example, the application of the word carpel in the more widely used biology or botany texts and it is clear that there is no common concept behind this widely used term. It is used variously for the entire gynoecium, for a pistil, or for an evolutionary and structural component of a compound pistil. This inappropriate diversity of usage is enhanced by the absence of well distributed, recent morphological glossaries. All too often the conceptual underpinnings of terms are lost to the everyday user.

The "Glossary" contains an Introduction, a chapter on consulted references, 13 chapters of terminology, and four separate indices. As is true for all sections of the book, the short, explanatory Introduction is reproduced in English, French, Portuguese, and Spanish. The multilingual approach is unique and thus provides a single international source for fern characterizations. The main body of the work is divided into the following sections: Figure, Order and Division, Position, Growth, Substance, Surface, Gametophytes, Sporophytes, Anatomy, Cytology, Ecology and Distribution, Evolutionary Relationships, and Nomenclature. As should be expected in a work of such magnitude there are some regrettable omissions. Three specific examples that I have noted are the absence of *aneuploid*, *dysploid*, and *epitype*. I also would like to have seen a reproduction of the chart of terminology of simple symmetrical plane shapes published by the Systematics Association Committee for Descriptive Biological Terminology (*Taxon* 11:245–247, and reproduced in W. T. Stearn. 1983. *Botanical Latin*, 3rd ed. David & Charles Publ., Great Britain), although because both are mandatory 'at-hand books', I do not lack for its absence.

In the short time that I have had this glossary, I have used it at least once or twice every week. Already it is becoming a bit dog-eared from use. Thankfully I have three copies at hand—one in my office, a second in my lab, and a third in our herbarium library. Lellinger's book is a must for all professional, and many avocational, pteridologists.—R. JAMES HICKEY, Botany Department, Miami University, Oxford, OH 45056.